IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) A recording apparatus, comprising:

determining means for determining a sequence to record input data in empty areas among recording areas of a recording medium for ~~substantially~~ uniformerly recording counts in respective recording areas; ~~and~~

recording means for recording said input data in said empty areas according to the sequence determined by said determining means;

registering means for registering said empty areas present on said recording medium in a first queue before said input data is recorded in said empty areas by said recording means, and, when said input data is recorded in said empty areas registered in said first queue, deleting the empty areas in which said input data has been recorded from said first queue, and registering empty areas from which data has been deleted in a second queue; and

moving means for moving said empty areas registered in said second queue to said first queue when said first queue becomes empty,

wherein said recording means records said input data in said empty areas registered in said first queue according to the sequence determined by said determining means.

2. (Canceled)

3. (Currently Amended) An apparatus according to ~~claim 2~~ claim 1, wherein said determining means determins a sequence to record input data in said empty areas registered in said first queue for uniformerly recording counts in the respective recording areas, and said moving means moves said empty areas registered in said second queue to said first queue while keeping the sequence of the empty areas when said first queue becomes empty.

4. (Currently Amended) An apparatus according to ~~claim 2~~ claim 1, wherein said recording means records said first queue and said second queue on said recording medium.

5. (Currently Amended) An apparatus according to claim 4, further comprising:

reading means for reading said first queue and said second queue which are recorded on said recording medium,[[;]] ~~and~~

wherein said recording means records said input data in said empty areas registered in said first queue read by said reading means, according to the sequence determined by said determining means,[[;]] and

wherein said registering means registers said empty areas from which data has been deleted in said second queue read by said reading means.

6. (Original) An apparatus according to claim 1, wherein said sequence comprises either a sequence of addresses of said empty areas or a sequence of sizes of said empty areas.

7. (Currently Amended) An apparatus according to claim 1, wherein said sequence comprises ~~either~~ a sequence of addresses of said empty areas, said registering means registers said empty areas from which data has been deleted in said first queue or said second queue, based on a positional relationship between said empty areas from which data has been deleted and areas in which said input data is recorded by said recording means immediately before the data is deleted.

8. (Currently Amended) An apparatus according to ~~claim 2~~ claim 1, wherein said recording means records positional information representing the positions of areas in which said input data is recorded, on said recording medium.

9. (Currently Amended) An apparatus according to claim 8, further comprising:

reading means for reading said positional information recorded on said recording medium,[[;]] and

wherein said registering means registers said empty areas present on said recording medium in said first queue or said second queue based on a relationship between the positions of said empty areas and the positions represented by the positional information read by said reading means.

10. (Currently Amended) A recording method, comprising the steps of:

determining a sequence to record input data in empty areas among recording areas of a recording medium for ~~substantially~~ uniformerly recording counts in respective recording areas; ~~and~~

recording said input data in said empty areas according to the sequence determined by said determining step;

registering said empty areas present on said recording medium in a first queue before said input data is recorded in said empty areas by said recording step, and, when said input data is recorded in said empty areas registered in said first queue, deleting the empty areas in which said input data has been recorded from said first queue, and registering empty areas from which data has been deleted in a second queue; and

moving said empty areas registered in said second queue to said first queue when said first queue becomes empty,

wherein said input data is recorded in said empty areas registered in said first queue according to the sequence determined by said determining step.

11. (Canceled)

12. (Currently Amended) A method according to ~~claim 11~~ claim 10, wherein said determining step determins a sequence to record input data in said empty areas registered in said first queue for uniformerly recording counts in the respective recording areas, and said

moving step moves said empty areas registered in said second queue to said first queue while keeping the sequence of the empty areas when said first queue becomes empty.

13. (Currently Amended) A method according to ~~claim 11~~ claim 10, wherein said recording step records said first queue and said second queue on said recording medium.

14. (Currently Amended) A method according to claim 13, further comprising ~~the step of~~:

reading said first queue and said second queue which are recorded on said recording medium,[[;]] ~~and~~

wherein said recording step records said input data in said empty areas registered in said first queue read by said reading step, according to the sequence determined by said determining step,[[;]] and

wherein said registering step registers said empty areas from which data has been deleted in said second queue read by said reading step.

15. (Previously Presented) A method according to claim 10, wherein said sequence comprises either a sequence of addresses of said empty areas or a sequence of sizes of said empty areas.

16. (Currently Amended) A method according to claim 10, wherein said sequence comprises ~~either~~ a sequence of addresses of said empty areas, said registering step registers said empty areas from which data has been deleted in said first queue or said second

queue, based on a positional relationship between said empty areas from which data has been deleted and areas in which said input data is recorded by said recording step immediately before the data is deleted.

17. (Currently Amended) A method according to ~~claim 11~~ claim 10, wherein said recording step records positional information representing the positions of areas in which said input data is recorded, on said recording medium.

18. (Currently Amended) A method according to claim 17, further comprising ~~the step of~~:

reading said positional information recorded on said recording medium,[[;]]

~~and~~

wherein said registering step registers said empty areas present on said recording medium in said first queue or said second queue based on a relationship between the positions of said empty areas and the positions represented by the positional information read by said reading step.

19. (Currently Amended) A computer-readable recording medium, storing a processing program, which when executed causes a processing apparatus ~~for enabling a computer~~ to ~~carry out~~execute a recording ~~method~~ process, said ~~method~~ recording process comprising ~~the steps of~~:

controlling determination of a sequence to record input data in empty areas among recording areas of a recording medium for ~~substantially~~ uniformerly recording counts in respective recording areas; ~~and~~

controlling recording of said input data in said empty areas according to the sequence determined by said determination controlling step;

controlling registration of said empty areas present on said recording medium in a first queue before said input data is recorded by the recording controlling step;

controlling the deletion said empty areas in which said input data has been recorded from said first queue, and the registration of empty areas from which data has been deleted in a second queue when said input data is recorded in said empty areas registered in said first queue; and

controlling movement of said empty areas registered in said second queue to said first queue when said first queue becomes empty,

wherein said input data is recorded in said empty areas registered in said first queue according to the sequence determined by said determination controlling step.

20. (Canceled)